# IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA

## **BECKLEY DIVISION**

HOLLI DAVIS, Individually, and as Parent and Guardian of LUKE DAVIS, a minor,

Plaintiff,

V.

CIVIL ACTION NO. 5:10-cv-00384

THE UNITED STATES OF AMERICA,

Defendant.

## MEMORADUM OPINION AND ORDER

Plaintiff brings this action pursuant to the Federal Tort Claims Act ("FTCA"), 28 U.S.C. §§ 2671–80. Plaintiff alleges medical negligence under the West Virginia Medical Professional Liability Act ("WVMPLA"), W. Va. Code §§ 55–7B–1, et seq. The claim arises out of the prenatal medical treatment provided to Plaintiff, Holli Davis, by Dr. Angel Rosas and other employees of Community Health Systems, Inc. ("CHS"), d/b/a Access Health, during her 2007 pregnancy with her son, Luke Davis, who has cerebral palsy.

On September 2, 2011, the Court entered a Memorandum Opinion and Order (Document 91) denying the parties' respective motions for summary judgment. Pursuant to 28 U.S.C. § 2402, this matter was tried to the Court without a jury on February 6, 7, 8 and 9, 2012. In accordance with Fed. R. Civ. P. 52(a)(1), the Court now makes its findings of fact and conclusions of law. All findings of fact in this opinion are made by a preponderance of the evidence.

#### I. PRELIMINARY FINDINGS OF FACT

# A. Medical Care from Beginning of Pregnancy until August 4, 2007

On March 30, 2007, Plaintiff Holli Davis was informed she was pregnant when she was examined at CHS by Certified Nurse-Midwife ("CNM"), Deborah Forst. (Joint Ex. 1 at 4.) On April 2, 2007, Holli Davis informed CHS that she felt like her hair and skin were crawling after she began taking a new blood pressure medicine. (*Id.*) The following day, Ms. Davis' blood pressure was checked and determined to be acceptable by CNM Forst. (*Id.* at 5.) On April 20, 2007, Ms. Davis complained to CNM Carolyn Spurlock of persistent spotting and no fetal heart tones. CNM Spurlock planned to have Ms. Davis get an ultra-sonogram. Also on that same day, Ms. Davis had an ultrasound which indicated an intrauterine pregnancy of 8 weeks 1 day. (*Id.* at 6.)

On April 24, 2007, during her visit with CNM Forst, Ms. Davis complained of increased bleeding. CNM Forst noted that Ms. Davis had a subchorionic bleed. Dr. David Rainey attempted to explain to Ms. Davis what a subchorionic bleed was, but she did not understand his explanation. (Tr. Vol. I. 95:1-15.) On May 11, 2007, Ms. Davis complained about increased bleeding and cramping. (Joint Ex. 1 at 6.) CNM Zion Elefterion noted that Ms. Davis had been spotting throughout her pregnancy due to the subchorionic bleed, and told Ms. Davis the bleeding would continue until the blood clot passed. (*Id.*) On this date, Ms. Davis had an ultrasound which indicated an intrauterine pregnancy of 11 weeks 1 day and a small subchorionic hematoma. (*Id.* at 7.) On May 29, 2007, Ms. Davis, again, complained of spotting, and CNM Forst noted that her cervix was closed and ordered continued pelvic rest. (*Id.* at 7.) Ms. Davis understood pelvic rest to mean "nothing inserted into the vagina," which included cessation of sexual activity. (Tr. Vol. I. 106:17.)

On July 10, 2007, an ultrasound showed that Ms. Davis' amniotic fluid was normal and that she was 19 weeks 5 days pregnant. (*Id.* at 7; Tr. Vol. III. 23:2-5.) Luke's anatomy also appeared to be normal. (Tr. Vol. III. 22:21-23:5.) On July 11, 2007, Ms. Davis called CMS to report a watery discharge and voice her concern that her amniotic fluid was low. (Joint Ex. 1 at 7.) She complained of increased fluid discharge during her July 27, 2007 appointment. Ms. Davis told CNM Spurlock that "[s]he was told by two technicians at PMU [Professional Medical Ultrasonics] that [her] fluid was 'low' and also at MSU [Mountain State University]." (Tr. Vol. III. 24:10-11.) CNM Spurlock performed a speculum exam and found no pooling of amniotic fluid, and also administered a nitrazine test which was negative. (Tr. Vol. III. 24:12-13, 29:2-3.) The purpose of the speculum exam was to rule out the possibility of a rupture of membranes. (*Id.*) CNM Spurlock testified that even a small amount of fluid will usually fill the speculum reservoir. (Tr. Vol. III. 28:7-8.)

A nitrazine test is nothing more than litmus paper used to test the pH of the fluid in the vagina. (Tr. Vol. I. 25:8-22; Tr. Vol. III. 30:8-22.) Amniotic fluid is very basic and will turn litmus paper blue, whereas normally the vagina is very acidic and will turn the litmus paper orange. (*Id.*) On July 27, 2007, Ms. Davis' nitrazine test was negative for the presence of amniotic fluid. (Joint Ex. 1 at 8)

# B. Medical Care from August 5, 2007, until August 21, 2007

On the evening of August 5, 2007, Ms. Davis went to the emergency room at Raleigh General Hospital ("RGH") because she was concerned with heavy bleeding. (Tr. Vol I. 99:10-12; Joint Ex. 1 at 8.) She indicated that she was concerned about bleeding and discharge throughout the entire pregnancy with Luke, unlike her previous pregnancy. When she and her husband arrived at the hospital, Ms. Davis was taken to the Labor and Delivery Department of RGH. (*Id.*)

Dr. Rosas, the attending physician, performed a speculum examination and reported finding no amniotic fluid, and the nitrazine test was, again, negative. (Joint Ex. 1 at 8.) However, Dr. Rosas had sonographer Cassie Rife perform an ultrasound. The first ultrasound worksheet indicated the amniotic fluid was normal. (Id.) On the second ultrasound worksheet, it was noted that Ms. Rife performed a "limited exam w/Dr. Rosas present during the exam." (Joint Ex. 1 at 8.) During this exam, Dr. Rosas stated that Ms. Davis' "fluid looked low by eyeing it." (Tr. Vol I. 100:18-20.) The second ultrasound worksheet noted that Ms. Davis' amniotic fluid was both "normal" and also "oligohydramnios." (Joint Ex. 8 at (HDavis-RGH-25A.)) Oligohydramnios means low amniotic fluid. (Tr. Vol. I. 160:20-21.) Dr. Rosas had Ms. Rife add the checkmark beside oligohydramnios on the second ultrasound worksheet. (Joint Ex. 4 at 17-19.) The second worksheet also indicated positive cardiac activity and fetal movement and that the placenta appeared unremarkable. (Joint Ex. 1 at 8; Joint Ex. 8 at (HDavis-RGH-25A.)) Dr. Rosas testified that the ultrasound worksheets are used as a "guideline" for preparing the final report. (Tr. Vol. I. 186:24.) The final ultrasound report, dated August 9, 2007, and signed by Dr. Rosas, described a "single viable intra-uterine pregnancy of approximately 23 weeks 1 day by today's measurements. There was no evidence of a subchorionic hematoma or placenta previa. Mildly decreased amniotic fluid for gestational age. Follow-up is recommended." (Joint Ex. 1 at 9; Joint Ex. 8 at (HDavis-RGH-44A)). Dr. Rosas testified that although the final report indicates amniotic fluid level was normal, it was less than he would like to see at that gestational age. (Trial Tr. Vol. I. 161:17-21.)

On August 6, 2007, at around 12:35 a.m., a nurse noted that Ms. Davis was up and getting ready to be discharged from RGH when she had an episode of bleeding, which the nurse described as thin blood that dripped onto the floor and ran down both of her legs. (Joint Ex. 1 at

9; Joint Ex. 8 at (HDavis-RGH-10)). In fact, the blood pooled on the floor, and Ms. Davis had to change her gown and socks because of the large amount of bleeding. (Tr. Vol. I. 102:22-103:25.) Ms. Davis described the blood as watery. (*Id.*) She returned to bed and an electronic fetal monitor ("EFM") was applied. However, no nitrazine test was preformed after this bleeding incident. (Joint Ex. 1 at 9.) At 1:05 a.m., the nurse noted that Dr. Rosas entered a progress note with his impression of a probable chronic subchorionic bleed. (*Id.* at 10) Around this same time, the nurse noted that Ms. Davis passed a one inch blood clot. (*Id.*) At 1:34 a.m., the nurse noted that Dr. Rosas came in to assess Ms. Davis and removed the electronic fetal monitor. (*Id.*)

No fern test was performed at any time on August 5th or 6th.<sup>1</sup> In fact, Ms. Davis had never heard of a fern test at that point. (Tr. Vol. I. 102:9-12.) Additionally, no amniocentesis with dye test was performed on that day or anytime during Ms. Davis' pregnancy.<sup>2</sup> On August 6, 2007, at 9:18 a.m., the nurse noted that Ms. Davis was given verbal and written discharge instructions, which she understood. (Joint Ex. 1 at 10.) Ms. Davis signed the discharge instructions sheet which indicated:

Most of the patients treated in Labor & Delivery are treated for false labor, urinary tract infections, bleeding or possible rupture of membranes. The following discharge instructions apply for these symptoms. The paragraphs marked with an asterisk (\*) will apply to you.

...

- 3. \* If you have any BLEEDING that is as heavy as a normal period or that causes you to heavily saturate a sanitary pad, you may call your Physician's office 24 hours a day for further instructions.
- 4. \* If you had a PELVIC EXAM, you may have some spotting which is normal.

<sup>&</sup>lt;sup>1</sup> To administer a fern test, a medical professional wipes moister out of a woman's vagina with a Q-tip and then wipes the Q-tip on a microscope slide. When the slide dries, if amniotic fluid is present it looks like a crystalized Christmas tree because of the salt content of amniotic fluid.

<sup>&</sup>lt;sup>2</sup> Amniocentesis with dye requires a doctor to "put a needle in the amniotic cavity under ultrasound guidance, instill a little blue dye called indigo carmine, and put a tampon in the vagina." (Tr. Vol. I. at 26:17-20.) If the tampon turns out blue, then it is positive that the membranes have ruptured. (Tr. Vol. I. at 26:20-22.)

5. \* Your Physician has determined that your membranes have not ruptured (YOUR WATER IS NOT BROKE). If at any time in the future you think you may have — ruptured membranes (your water has broke) you may call your Physician's office 24 hours a day for further instruction. If you experience a sudden gush of fluid from the vagina you may have ruptured membranes (your water may be broke). This membrane protects you [sic] baby from infection, therefore it is very important to call if there is any possibility of leaking amniotic fluid.

(Joint Ex. 1 at 10-11; Joint Ex. 8 at (HDavis-RGH-13)). Ms. Davis was instructed to continue pelvic rest and return to the office if she experienced increased bleeding or pain. She and her husband were not having sexual intercourse at this point in the pregnancy. (Tr. Vol. I. 106:20-24.) At a follow-up appointment on August 10, 2007, Ms. Davis was seen by Dr. Rainey. Dr. Rainey reported that Ms. Davis's bleeding had decreased, with rare spotting, and he indicated her fetal movements were normal and she had no contractions or fluid loss. (Joint Ex. 1 at 12.) Ms. Davis testified that when she told Dr. Rainey that the bleeding had decreased, she had been on "modified bed rest" because her mother took care of her fifteen month-old son for two days and she had rested. (Tr. Vol. I. 116:22-117:7.) Also, on this day, Ms. Davis had a positive urine culture consistent with a urinary tract infection and was prescribed penicillin. (Joint Ex. 1 at 12.)

Following the August 10th appointment, Ms. Davis reported increased bleeding, so CMS squeezed her in for an appointment on August 17th. (Trial Tr. Vol. I. 111:21-25.) At this appointment, Ms. Davis was seen by CNM Elefterion. CNM Elefterion testified Ms. Davis did not complain of amniotic fluid leaking at this appointment. (Tr. Vol. III. 57:1-17.) Further, CNM Elefterion testified that if Ms. Davis indicated she was leaking amniotic fluid then she "would have done a speculum exam at that point." (Tr. Vol. III. 55:4-9.) On the other hand, Ms. Davis testified that CNM Elefterion "came in, cut and

dry told me that she was not going to check me, that I had an ultrasound appointment already scheduled for Monday [August 20th], that I just needed to go to it, that I was probably urinating on myself because most pregnant ladies have the baby on the bladder." (Tr. Vol I. 112:5-9.) No speculum exam was performed during the August 17th appointment. However, a nitrazine test was administered and, again, came back negative. (Tr. Vol. I. 112:16-25.)

On August 20, 2007, Ms. Davis was examined by CNM Debra Crowder after an ultrasound reported an amniotic fluid index (AFI) of 0.5 cm. (Joint Ex. 1 at 12; Joint Ex. 9 at HDavis-AOG-4, 32, 33). A speculum exam found no pooling and the nitrazine test was inconclusive. (*Id.*) Also, a fern test was negative. (*Id.*) Ms. Davis was subsequently transferred to RGH at 5:33 p.m., where Dr. Roy Wolfe was the treating physician. (Joint Ex. 1 at 12.) Ms. Davis received IV hydration, antibiotics and steroids. (Joint Ex. 1 at 12-13; (HDavis-RGH-69)). On August 21, 2007, an ultrasound performed and interpreted by Dr. Rosas indicated an AFI of 0.8 cm, which is consistent with severe oligohydramnios. (Joint Ex. 1 at 13; (HDavis-RGH-51)). Ms. Davis then requested transfer to a NICU (Neonatal Intensive Care Unit) because she was concerned with her low amniotic fluid and believed her doctors were not listening to her. (Joint Ex. 1 at 13; Tr. Vol. I. 113:19-21.)

## C. Medical Care at Cabell Huntington Hospital ("CHH")

Ms. Davis was transferred to CHH on August 21, 2007, at 12:43 p.m.<sup>3</sup> (Joint Ex. 1 at 13; (HDavis-RGH-71-72)). Upon admission to CHH, Ms. Davis was under the care of Dr. David Chaffin. She remained at CHH for the rest of her pregnancy. CHH medical records indicate Ms.

<sup>&</sup>lt;sup>3</sup> Ms. Davis preferred to go to Charleston Area Medical Center because of the proximity to her home but no beds were available. (Tr. Vol. I. 114:11-13.)

Davis was transported from RGH with secondary to severe oligohydramnios. (Joint Ex. 7 at 6; Joint Ex. 8 at (HDavis-CHH-4)). A pelvic examination indicated that Ms. Davis' cervix was closed, there was a "significant amount of pooled amniotic fluid in the posterior fornix which was nitrazine positive and ferning positive." (Joint Ex. 8 at (HDavis-CHH-6)). This was the first time either the nitrazine or fern test were positive and the first time a speculum exam noted pooling of amniotic fluid. Ms. Davis was given three doses of IV antibiotics (Unasyn) and then took ampicillin orally for the rest of her pregnancy. She was also placed on bed rest.

Ms. Davis testified that Dr. Chaffin had her lie still for forty-five (45) minutes before he performed a speculum exam to check for pooling of amniotic fluid. (Tr. Vol. 1. 116:2-3). Ms. Davis also testified that Dr. Chaffin said a patient needs to lie down for at least twenty (20) minutes before a speculum exam to pool amniotic fluid is performed. (*Id.*) However, Dr. Chaffin testified that usually two minutes was enough time for a patient to lie down before a speculum exam, except for unique cases. (Joint Ex. 7 at 38.) An ultrasound report from August 22nd, again, indicated oligohydramnios. On August 25th, Ms. Davis had a gush of bloody fluid with an odor, as well as cramping abdominal pain, but there were no signs of infection or labor. (Joint Ex. 1 at 15; Joint Ex. 8 at (HDavis-CHH-35-36)). On August 26th, she had no contractions and slight spotting. (Joint Ex. 8 at (HDavis-CHH-34-35); Joint Ex. 7 at 33.) The next day, Ms. Davis had no signs or symptoms of premature labor or infection. (*Id.*) Although she had no signs or symptoms of premature labor or infection on August 28th, she did have bright red spotting on that morning. (Joint Ex. 1 at 15.)

On August 29, 2007, Ms. Davis's abdomen began hurting when pressure was applied. (Vol I. at 121:12-122:6.) She complained of cramping and an increase in vaginal discharge with an odor. (Joint Ex. 1 at 15; Joint Ex. 8 at (HDavis-CHH-32). Dr. Chaffin's impression was

"early chorio" and he recommended delivery. (Joint Ex. 8 at (HDavis-CHH-32); Joint Ex. 7 at 33.) Chorioamnionitis ("chorio") is a bacterial infection of the membranes surrounding the fetus. (Tr. Vol. I. 70:25-71:1.) Luke Davis was delivered by Cesarean section ("C-section") on August 29, 2007. The treating physician noted that "[t]here were adherent modules of what appeared to be pus and debris scattered throughout the endometrial cavity." (Joint Ex. 8 at (HDavis-CHH-142)). The treating physicians initially suspected chorio based on their clinical impression. However, the pathological report indicated Ms. Davis did not have chorio. The report, in part, reads as follows:

[t]he [p]lacenta with attached three-vessel umbilical cord submitted for breech presentation and suspected chorioamnionitis: Subchorionic fibrin deposition; focal hematoma formation (l cm in thickness); no evidence of inflammation noted in membranes or cord.

(Joint Ex. 8 at (HDavis-CHH-294)). The Court weighs the competing expert testimony on this issue below.

## D. Luke's medical treatment

Luke was treated at CHH for seventy-four (74) days following his birth. (Joint Ex. 1 at 20.) Dr. Renee Domanico was Luke's treating neonatologist at Cabell Huntington Hospital. An ultrasound of Luke's head on September 14, 2007, reported "some increased echogenicity in the caudothalmic groove which may represent a grade I germinal matrix hemorrhage." (*Id.*) Dr. Domanico stated in her September 28, 2007 ultrasound report that "[t]here is interval increase in degree of echogenic material within the left lateral ventricle consistent with probable intraventricular hemorrhage...I suspect grade II intraventricular hemorrhage in the left lateral ventricle." (*Id.*) On November 2, 2007, Luke had his bilateral inguinal hernia repaired. (*Id.*) Luke was discharged from CHH on November 10, 2007. (*Id.*)

On October 16, 2008, Dr. Mary Payne, a pediatric neurologist, diagnosed Luke with cerebral palsy affecting all of his extremities. (*Id.* at 21.) Luke has had numerous medical diagnoses and has undergone numerous medical procedures related to cerebral palsy, which the Court briefly summarizes. On February 27, 2009, Luke had a gastrostomy tube placement because of gastro esophageal reflux disease with several episodes of aspiration pneumonia. (*Id.* at 23.) On May 3, 2009, pediatric pulmonologist Dr. Benjamin Gaston diagnosed Luke with DPB (bronchopulmonary dysplasia) and laryngomalacia which he thought was likely related to his cerebral palsy. (*Id.* at 24.) On February 18, 2010, Dr. Mark Romness, an orthopedic specialist, performed several surgeries to enable Luke to have full extension of his knees and to be able to put his feet into his ankle-foot orthosis properly. (*Id.* at 24) Luke has had several other orthopedic procedures addressing issues with his lower extremities related to his cerebral palsy.

## II. APPLICABLE LAW

The Court has jurisdiction over this matter under the Federal Tort Claims Act ("FTCA"), 28 U.S.C. §§ 1346(b), 2401(b) and 2671-2680. Dr. Rosas and CHS's employees are deemed to be employees of the United States for purposes of the FTCA. See 42 U.S.C. § 233. This Court has jurisdiction over claims against the United States "for money damages . . . for injury or loss of property, or personal injury or death caused by the negligent or wrongful act or omission of any employee of the Government while acting within the scope of his office or employment, under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred." 28 U.S.C. §§ 1346(b)(1). The United States concedes that all medical personnel at CHS were acting within the

scope of their employment, which makes the United States liable for injuries resulting from their negligence.

The FTCA requires the Court to use the substantive law of the state where the alleged negligence took place, which, in this case, is West Virginia. *Bellomy v. United States*, 888 F. Supp. 760, 763-64 (S.D. W.Va. 1995). Accordingly, this action is governed by the WVMPLA, which in part provides:

- (a) The following are necessary elements of proof that an injury or death resulted from the failure of a health care provider to follow the accepted standard of care:
- (1) The health care provider failed to exercise that degree of care, skill and learning required or expected of a reasonable, prudent health care provider in the profession or class to which the health care provider belongs acting in the same or similar circumstances; and
- (2) Such failure was a proximate cause of the injury or death.
- (b) If the plaintiff proceeds on the "loss of chance" theory, *i.e.*, that the health care provider's failure to follow the accepted standard of care deprived the patient of a chance of recovery or increased the risk of harm to the patient which was a substantial factor in bringing about the ultimate injury to the patient, the plaintiff must also prove, to a reasonable degree of medical probability, that following the accepted standard of care would have resulted in a greater than twenty-five percent chance that the patient would have had an improved recovery or would have survived.
- W. Va. Code § 55-7B-3. Proof of medical negligence requires expert testimony. *Bellomy v. United States*, 888 F. Supp. 760, 764 (S.D. W.Va. 1995). With respect to expert witness testimony on the standard of care, the WVMPLA provides the following:
  - (a) The applicable standard of care and a defendant's failure to meet the standard of care, if at issue, shall be established in medical professional liability cases by the plaintiff by testimony of one or more knowledgeable, competent expert witnesses if required by the court. Expert testimony may only be admitted in evidence if the foundation therefor is first laid establishing that: (1) The opinion is actually held by the expert witness; (2) the opinion can be testified to with reasonable medical probability; (3) the expert witness possesses professional knowledge and expertise coupled with knowledge of the applicable standard of care to which his or her expert opinion testimony is addressed; (4) the expert

witness maintains a current license to practice medicine with the appropriate licensing authority of any state of the United States: *Provided*, That the expert witness' license has not been revoked or suspended in the past year in any state; and (5) the expert witness is engaged or qualified in a medical field in which the practitioner has experience and/or training in diagnosing or treating injuries or conditions similar to those of the patient . . . [.]

# W. Va. Code § 55-7B-7(a).

The WVMPLA does not entirely displace common law principles of medical negligence actions. These common law principles help explain the context and concepts contained in the WVMPLA. In West Virginia, the locality rule in medical malpractice cases has been abolished. *Plaintiff v. City of Parkersburg*, 176 W. Va. 469, 470 (1986). Therefore, the standard of care is a national standard. (*Id.*) With limited exceptions, which do not apply in this case, a plaintiff must establish the applicable standard of care and a breach of such standard of care through expert testimony. W. Va. Code § 55-7B-7; *Bellomy v. United States*, 888 F. Supp. 760, 764 (S.D. W.Va. 1995). Whether a medical professional breached the applicable standard of care is to be judged at the time of his alleged negligent acts. *Bellomy*, 888 F. Supp. at 763-64 (quoting Syl. Pt. 2, in part, *Schroeder v. Adkins*, 141 S.E.2d 352 (W. Va. 1965)).

To prevail, the plaintiff has the burden to prove, by a preponderance of the evidence, that the defendant's breach of the applicable standard of care was the proximate cause of the plaintiff's injury. *Sexton v. Greico*, 216 W. Va. 714, 716 (2005) (per curiam). The West Virginia Supreme Court stated that "[t]he phrase 'a proximate cause' in W. Va. Code, 55–7B–3 'must be understood to be that cause which in actual sequence, unbroken by any independent cause, produced the wrong complained of, without which the wrong would not have occurred." *Mays v. Chang*, 213 W. Va. 220, 224 (2003) (quoting Syl. Pt. 3, *Webb v. Sessler*, 135 W.Va. 341, 63 S.E.2d 65 (1950)). Va. 1986)). Expert witness causal relationship testimony need only be stated in terms of a reasonable probability. W. Va. Code § 55-7B-7; *Hovermale v. Berkeley Springs* 

*Moose Lodge*, 165 W. Va. 689 (1980). The West Virginia Supreme Court of Appeals set forth the following rule of law, which still applies post WVMPLA, with respect to establishing proximate cause in medical malpractice cases:

Medical testimony to be . . . admissible and sufficient to warrant a finding by the [trier of fact] of the proximate cause of an injury is not required to be based upon a reasonable certainty that the injury resulted from the negligence of the defendant. All that is required to render such testimony admissible and sufficient to carry it to [trier of fact] is that it should be of such character as would warrant a reasonable inference by the [trier of fact] that the injury in question was caused by the negligent act or conduct of the defendant.

Sexton, 216 W.Va. at 716 (citing Syl. pt. 1, Pygman v. Helton, 148 W. Va. 281 (1964)).

In 2003, West Virginia also codified a separate causation standard under a "loss of chance theory." The 2003 amendment ads clarity to and further defines the loss of chance theory set forth in *Thornton v. CAMC*, *Etc.*, 172 W. Va. 360 (1983) which stated that:

Where a plaintiff in a malpractice case has demonstrated that a defendant's acts or omissions have increased the risk of harm to the plaintiff and that such increased risk of harm was a substantial factor in bringing about the ultimate injury to the plaintiff, then the defendant is liable for such ultimate injury.

Thorton,\_172 W. Va. at 361. Under the loss of chance theory, the 2003 amendment requires a plaintiff to prove "that the health care provider's failure to follow the accepted standard of care deprived the patient of a chance of recovery or increased the risk of harm to the patient which was a substantial factor in bringing about the ultimate injury to the patient. . . [.]" W. Va. Code § 55-7B-3(b). Importantly, a plaintiff must "also prove, to a reasonable degree of medical probability, that following the accepted standard of care would have resulted in a greater than twenty-five percent chance that the patient would have had an improved recovery or would have

<sup>&</sup>lt;sup>4</sup> In *Sexton*, the 1986 version of W.Va.Code 55-7B-3 applied to the medical malpractice claim. However, the particular language in the 2003 amendment of W.Va. Code 55-7B-3 addressed in *Sexton* [(2) Such failure was a proximate cause of the injury or death] is identical in both the 1986 and 2003 versions of the statute. *Sexton*, 216 W.Va. at 719 n.3.

survived." (*Id.*) In essence, the substantial factor concept now has a statistical minimum standard of proof.

In evaluating the testimony of expert witnesses, "[q]uestions of an expert's credibility and the weight accorded to his testimony are ultimately for the trier of fact to determine." *Arkwright Mut. Ins. Co. v. Gwinner Oil, Inc.*, 125 F.3d 1176, 1183 (8th Cir. 1997).

## III. ANALYSIS

## A. Standard of Care

Plaintiff's Expert, Dr. Robert Allen Dein, is a board certified obstetrician/gynecologist and practices at Main Line Women's Health Care Associates located outside of Philadelphia, Pennsylvania. (Tr. Vol. I. 18:3-6.) Dr. Dein was qualified to testify as an expert in his field of obstetrics and gynecology. Dr. Dein testified that Dr. Rosas' actions fell below the standard of care required in the field of obstetrics and gynecology. Specifically, Dr. Dein testified on direct examination that

as of the early morning of August 6th, given the information he had which was a reduction of amniotic fluid followed by this large volume of bloody fluid that came down the patient, he should have made a diagnosis of ruptured membranes. He should have, therefore, put the patient in the hospital at bedrest, given her antibiotics, given her steroids. And it's my testimony that had the patient been at bedrest instead of being sent home to take care of a toddler, she would have had a greater likelihood of a longer latency period, would not have delivered as early as she did.

(Tr. Vol. I. at 46-47.) Dr. Dein further testified that the standard of care required Dr. Rosas to "work that patient up to know why her [amniotic] fluid [was] reduced." (Tr. Vol. I. 51:1-2.) Dr. Dein testified that thin blood running down Ms. Davis' leg was absolutely an indication of a possible rupture of the membranes. (Tr. Vol. I. 52:18-25.) Dr. Dein further testified that Dr. Rosas failed to meet the standard of care because he did not perform an additional ultrasound,

nitrizine test, fern test or amniocentesis with dye test after the bleeding incident. (Tr. Vol. I. 66:19-22.) Dr. Dein testified that Ms. Davis' membranes ruptured prior to August 5th.<sup>5</sup>

Defendant's expert, Dr. Larry Paul Griffin, is a board certified obstetrician/gynecologist and currently practices at Women's Care Physicians in Louisville, Kentucky. (Tr. Vol. IV. 11, 17.) Dr. Griffin testified that Luke was born as the result of an "abnormality in the placental implantation site and the formation of the placenta which ultimately led to a subchorionic bleed, ultimately leading to that expanding, causing a partial abruption, causing then rupture of membranes and premature delivery." (Tr. Vol. IV. 32:7-12.) Dr. Griffin further testified that there is little a doctor can do to change the course of events with an abnormal placental implantation that leads to a subchorionic bleed. (Tr. Vol. IV. 36:7-11.) Dr. Griffin testified that Dr. Rosas met the standard of care.

As discussed below, the Court resolves the issues in this case on causation. Therefore, for the purposes of this opinion, the Court assumes, without finding, that Dr. Rosas and employees of CHS breached the standard of care by failing to perform the necessary tests to diagnose Ms. Davis's ruptured membrane and failing to give her antibiotics, steroids and place her on bed rest.

<sup>&</sup>lt;sup>5</sup> The Government objected to this line of questioning as beyond the scope of Dr. Dein's expert report. (Tr. Vol. I. 61-62.) Rule 26 (a)(2)(B) of the Federal Rules of Civil Procedure requires a written expert report to contain, among other things, "(i) a complete statement of all opinions the witness will express and the basis and reason for them." Rule 37(c)(1) of the Federal Rules of Civil Procedure provides that "[i]f a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial *unless the failure was substantially justified or is harmless.*" Fed. R. Civ. P. 37(c)(1). In his expert report, Dr. Dein stated that "[w]hen Ms. Davis noted 'thin blood running down both legs' early in the morning of 8/6/07, that was more probable than not evidence of blood mixed with amniotic fluid, as vaginal bleeding would be of a much thicker consistency in an undiluted state." (Pl. Ex. 7 at 5.) The Court finds Dr. Dein's statement that the thin blood was mixed with amniotic fluid reasonably infers Dr. Dein held the opinion that Ms. Davis's membranes had ruptured at or before that time. Thus, Dr. Dein's testimony that he believed the rupture occurred before August 5th is admissible. Accordingly, the Government's objection is overruled.

## B. Causation

Assuming that Dr. Rosas' treatment on August 5th and 6th fell below the standard of care, the Court must next decide if this breach proximately caused Plaintiff's injuries under the WVMLPA. The Plaintiff bears the burden to prove that Dr. Rosas' and CHS's breach of the standard of care caused Luke's cerebral palsy. To determine if Plaintiff met the burden of proof for causation, the Court must answer two questions. First, did Dr. Rosas' failure to diagnose the ruptured membranes and place Ms. Davis on antibiotics, steroids and bed rest on August 5th and 6th cause Luke to be born prematurely? Second, did this prematurity cause cerebral palsy? Plaintiff's theory of causation, as to prematurity, is that if Dr. Rosas would have properly diagnosed and treated the ruptured membranes on August 5th and 6th, Ms. Davis would not have developed chorio (requiring Dr. Chaffin to deliver Luke prematurely) and her latency period would have been extended, thereby drastically reducing Luke's chances of having cerebral palsy. Alternatively, Plaintiff theorizes that even without chorio, Dr. Rosas' failure to diagnose and treat Ms. Davis' ruptured membranes deprived her of the opportunity to get bed rest, antibiotics, and steroids which would have extended her latency period, thereby drastically reducing Luke's chances of having cerebral palsy.

## 1. Chorio

Prior to taking up the causation question, the Court first addresses whether Ms. Davis developed chorio. Dr. Dein opined in his report that "[t]here is no question at all from the totality of the records that Ms. Davis developed chorio[], which led to the decision to perform a cesarean section on [August 29, 2007. . .]." (Pl. Ex. 7 at 5.) In his expert report, Dr. Dein stated the following:

The negligent actions of Dr. Rosas and his partners deprived Ms. Davis of the opportunity to avail herself to early antibiotic therapy and bed rest, which led to a

decreased latency period and an earlier onset of chorio[]. The earlier the gestational age a baby is exposed to the inflammatory effects of intrauterine infection, the greater the likelihood is of subsequent neurologic morbidity. It is more probable than not that had Ms. Davis been placed at bed rest and given antibiotics, rather than allowed to be at home at full activities, her onset of chorio[] would have been delayed, delivery would have been delayed, and the neurologically outcome of her son would have been improved or normal.

(Pl. Ex. 7 at 5-6.) Despite the pathological finding that Ms. Davis did not have chorio, Dr. Dein testified that the nodules of pus found in the uterus, the uterine tenderness, and the smelly discharge were all indications that Ms. Davis had a chronic infection. (Tr. Vol. I. 72:1-6.) In support, Dr. Dein cites to Dr. Chaffin's testimony that Ms. Davis "developed a pretty severe uterine tenderness consistent with the diagnosis of chorio." (Joint Ex. 7. at 26.) It is undisputed that Dr. Chaffin's decision to perform the C-section on August 29th was because he suspected chorio. However, Dr. Chaffin went on to testify that Ms. Davis apparently did not have chorio because pathology did not confirm an infection. (*Id.* at 35.) Dr. Chaffin further testified that pus cannot be related to some form of infection without evidence on the pathology. (*Id.* at 42.) Importantly, Dr. Dein testified that Dr. Chaffin acted completely appropriate in all respects with the delivery of Luke. (Tr. Vol. I. 71:18-19.)

With respect to the diagnosis of an infection, Defendant's expert Dr. Griffin testified that "the impression of many things is often made clinically, but it's verified or disproven frequently by pathology examination." (Tr. Vol. IV. 34:13-15.) Dr. Griffin testified there was no "evidence of intrauterine infection [chorio] on either the placenta or the membranes or the cord in this placental pathology examination." (Tr. Vol. IV. 34:4-7.) (*Id.*)

The medical experts clearly have different opinions on whether clinical observations or pathology is more important in diagnosing chorio. After weighing all the evidence contained in the clinical records and the testimony of Dr. Dein, Dr. Chaffin, and Dr. Griffin, the Court finds

by a preponderance of the evidence that Ms. Davis did not have chorio. In making this finding, the Court finds Dr. Griffin's and, particularly, Dr. Chaffin's testimony to be more credible than Dr. Dein's testimony on this issue. Dr. Chaffin, who has no apparent stake in the outcome of this case, acknowledges that the clinical observation made him suspect chorio, but he ultimately concluded that Ms. Davis did not have chorio because of the lack of pathological confirmation. The Court also finds Dr. Dein's prior testimony in the Mingo County, West Virginia, Circuit Court case, styled Candace Norman vs. Health Management Associates, Civil Action 97-C-308, to be inconsistent with his testimony in the instant case. In that prior case, Dr. Dein testified that "the largest proof is the pathology report where the pathologist looks at the placenta, sees a very large area of recent clot on the maternal surface of the placenta and that really proves your diagnosis." (Tr. Vol. I. 82:1-4.) This inconsistent testimony renders his opinion, as to the clinical diagnosis of chorio, in the instant case, less credible. (Tr. Vol. I. 82:1-4.) Although Dr. Dein also previously testified "the major proof is the operative findings," his testimony that pathology is just a portion of the totality of the records is inconsistent with his prior opinion that pathology "really proves your diagnosis." Accordingly, the Court concludes Ms. Davis did not have chorio based on the testimony of Dr. Chaffin and Dr. Griffin and, most importantly, on the pathological finding that she did not have an infection.

# 2. Prematurity Causation

Dr. Dein opined that the "earlier the gestational age a baby is exposed to the inflammatory effects of intrauterine infection, the greater the likelihood is of subsequent neurologic morbidity." (Pl. Ex. 7 at 5-6.) Dr. Dein also testified that "chorio[] leads to something called cytokine release in a baby which can cause neurologic injury. It can cause bleeding in the brain. The more premature a baby is, the more susceptible they are to the effects

of infection. So, if there's any indication of an infection, you would certainly want to get that baby delivered." (Tr. Vol. I. 74:10-16.) Dr. Dein's testimony relative to the causation of Luke's cerebral palsy was, initially, largely based on his opinion that Ms. Davis had chorio, which, as discussed above, the Court has found the Plaintiff did not have. Dr. Dein ultimately testified that Luke's intracranial bleeding caused his cerebral palsy. (Tr. Vol. I. 75:13-23.) However, Dr. Dein also testified that Ms. Davis "was exposed to infection and was not put at bed rest for some [fourteen] 14 days. And by putting her at bedrest on August the 6th, my opinion, to a reasonable degree of medical certainty, is that it would have prolonged her latency period. She would have been pregnant, in other words, for more days. And every day at that very premature junction is critical." (Tr. Vol. I. 76:6-13.) Dr. Dein testified, without explanation, that this would have increased Luke's chances by more than twenty five percent (25%), but offered no testimony as to how he came to this percentage. (Tr. Vol. I. 76:3.)

Dr. Chaffin testified that if Ms. Davis' membranes ruptured three weeks prior to August 21, 2007, then his "goal would have been to get her three weeks later looking just like she arrived in my labor and delivery." (Joint Ex. 7 at 34.) Moreover, Dr. Dein, agreeing with Dr. Chaffin, testified that when Ms. Davis arrived at CHH, "[t]here were no signs of fetal compromise. She was not in labor. She was not in pain. There could have been some subclinical infection that became manifested later. That's impossible to know. There were no overt signs of infection." (Tr. Vol. I. 86:11-15.)

Luke Davis was born prematurely because Dr. Chaffin, with the suspicion of chorio and Ms. Davis's ruptured membranes, made the decision to perform a C-section. As noted above, Dr. Dein testified that Dr. Chaffin acted completely appropriate in all respects with the delivery of Luke. In essence, Dr. Dein agrees with the decision to deliver Luke based on the assumption

that Ms. Davis had chorio. However, the pathology proves that she did not have chorio. The Court finds that Plaintiff failed to prove that but for Dr. Rosas and CHS's assumed breach, Ms. Davis' latency period would have extended beyond August 29th. The Court gives great weight to the testimony of Dr. Chaffin that if Ms. Davis' membranes ruptured three weeks prior to August 29th, then his "goal would have been to get her three weeks later looking just like she arrived in my labor and delivery." (Joint Ex. 7 at 34.) Moreover, Dr. Dein, agreeing with Dr. Chaffin, testified that when Ms. Davis arrived at CHH she was not in labor, pain, or infected. (Tr. Vol. I. 86:11-15.) Additionally, Plaintiff submitted no evidence to prove how much longer Ms. Davis' latency period could have been extended without the development of chorio, aside from the general statement that her latency period would have been extended and each additional day would have helped. Dr. Chaffin ultimately made the decision to perform the C-section on August 29th, thereby cutting off any opportunity to increase the latency period beyond that day. Most importantly, however, Plaintiff's theory of causation relies on the existence of chorio, which, by the weight of the evidence, was not present.

## 3. Cerebral Palsy Causation

However, even if one assumes that Dr. Rosas' breach of the standard of care resulted in Luke's premature birth, Plaintiff failed to prove what caused Luke's cerebral palsy. During direct examination, Dr. Dein, opined as follows:

- Q. Okay. . . . do you know if Luke Davis suffered any intracranial bleeding that occurred after the delivery on August 29th that damaged the white matter of his brain?
- A. The records indicate that that's true.
- Q. Okay. And such bleeding in the intracranial, you know, a bleed of that nature, that would -- is that a common occurrence in your view in the field

of obstetrics and gynecology, an indication that would cause cerebral palsy?

## A. Yes.

(Tr. Vol. I. 75:13-23.) Dr. Dein did not develop this theory of causation beyond this general statement. Dr. Chaffin, who practices in the same field of obstetrics and gynecology, stated that the cause of cerebral palsy was beyond his area of expertise. (Joint Ex. 7 at 48.) Although Dr. Dein clearly has expertise in his field, his general and conclusory statement regarding the cause of cerebral palsy should be given little weight where there is no attendant evidence as to his training and experience with diagnosing the cause of cerebral palsy and where there is little or no testimony connecting his general opinion to the medical facts related to Luke.

On the other hand, Dr. Renee Domanico, who was the treating neonatologist at CHH, appeared by deposition in this case and testified about the level of intracranial bleeding that will cause cerebral palsy. Dr. Domanico testified that Luke had a Grade I and possibly a Grade II intraventricular hemorrhage. (Joint Ex. 6 at 20.) Dr. Domanico explained that "[i]f a baby is born prematurely, and has to then take over controlling their own blood pressure, they don't always do it very effectively. And they can get high blood pressure/low blood pressure swings that can make those blood vessels rupture and bleed." (*Id.* at 21.) Dr. Domanico testified that a Grade I hemorrhage is classified as minor. (*Id.*) Dr. Domanico also testified that she suspected a Grade II intraventricular hemorrhage but that the blood clot resolved. (*Id.* at 25.) Finally, and most importantly, when asked if Luke's hemorrhage had any adverse impact on his health, Dr. Domanico testified that an "[i]ntraventricular hemorrhage even up to Grade II resolve[s] without any neurologic sequelae. Higher grades, Grade III and Grade IV, have more impact on brain tissue itself. But a Grade I and a Grade II is not associated with any neuro-developmental abnormality." (Joint Ex. 6 at 26.)

On cross examination, Dr. Dein indicated that he read Dr. Renee Domanico's deposition in preparation of his expert report. (Tr. Vol. I. 78:8-10.) Dr. Dein also testified that he could not recall finding any issue or disagreement with any testimony in Dr. Domanico's deposition. (Tr. Vol. I. 78:14-16.) In fairness to Dr. Dein, the Defendant, on cross examination, did not point to any specific portion of Dr. Domanico's testimony. Nevertheless, the Court finds this testimony unearths a crucial weakness in Dr. Dein's general direct examination testimony that Luke's intracranial bleeding caused his cerebral palsy. In making this finding, the Court credits and gives greater weight to the testimony of Dr. Domanico that Grade I and II intraventricular brain hemorrhages resolve without any neurological problems and are not associated with any neurodevelopmental disorder. Dr. Dein simply did not discuss what type of brain intracranial bleeding Luke had, nor did the Plaintiff submit any evidence that Luke had any intracranial bleeding above a "suspected" Grade II hemorrhage to rebut the testimony of Dr. Domanico. In other words, in assessing the credibility and weight that should be given to these two opinions, the Court finds that factual and medical explanation was given in support of Dr. Domanico's testimony, whereas Dr. Dein testified in a general, conclusory manner without giving a basis, related to Luke's actual medical condition, for his opinion relative to the causation of cerebral palsy.

Plaintiff's theory of causation simply based on prematurity is likewise misguided. Although not considered as evidence, Plaintiff's statement in closing highlights the weakness of this general prematurity causation argument. Plaintiff argued that "[b]leeding is associated with ruptured membranes. Ruptured membranes [are] associated with prematurity. Prematurity is associated with cerebral palsy." (Tr. Vol. IV. 132:6-8) With respect to prematurity as the cause

of cerebral palsy, Plaintiff appears to rely on the following testimony of Dr. Dennis Jerome Matthews:

Q. You had mentioned that he (Luke Davis) had sustained a permanent neurological injury. I'm quoting that from the first paragraph of page 2 of your report. What injury are you referring to?

A. Injury to the periventricular leukomalacia that he has or the – he had a Grade I or II bleed. And so the pattern of CP (cerebral palsy) that he has is consistent with an injury to the white matter around the ventricles.

Q. Could you tell me how that occurred?

A. Most frequently, it's related to prematurity.

(Pl. Ex. 11, deposition at 9-10.) Dr. Matthews was asked to review Luke's medical records and render an opinion about his rehabilitation needs and life expectancy. (*Id.* at 3.) In his report, Dr. Matthews opined that Luke "sustained a permanent neurological injury with subsequent static encephalopathy, spastic diplegic cerebral palsy, bronchopulmonary dysplasia, dysphagia with gastrostomy tube and developmental delay." (Pl. Ex. 11, Letter at 2.) Dr. Matthews' testimony was used for the purposes of damages rather than causation. Furthermore, simply stating that cerebral palsy is frequently related to prematurity does not cure Plaintiff's causation problem. Plaintiff has not moved past the unfortunate circumstances that some babies born prematurely develop cerebral palsy and others do not, while some babies born to term, likewise, have cerebral palsy and others born to term do not. The only evidence put forward by Plaintiff with respect to the cause of Luke's cerebral palsy consisted of general statements about intracranial bleeding caused by prematurity and subsequent neurological injury. Ultimately, Plaintiff failed to prove that Luke ever had any intracranial bleeds above Grade II, which Dr. Domanico testified would resolve on their own without resulting in cerebral palsy. The inferences Plaintiff asks the Court to draw are simply not reasonable in light of the totality of the evidence. Recognizing the dire

circumstances of this case, but having assessed the evidence in light of the applicable law, the

Court finds Plaintiff has failed to prove by a preponderance of the evidence that Luke's cerebral

palsy was caused by the Defendant's assumed breach of the standard of care.

IV. CONCLUSIONS OF LAW

In view of the forgoing, the Court concludes that Plaintiff has failed to prove, by a

preponderance of the evidence, the requisite elements under the Medical Professional Liability

Act, and therefore, the Court FINDS the Defendant is not liable to the Plaintiff for medical

negligence. Having assessed the case on the merits of the evidence, the Court finds Defendant's

motion pursuant to Rule 52(c) of the Federal Rules of Civil Procedure to be moot. Judgment

will, therefore, be entered in favor of Defendant and the case will be removed from the Court's

docket.

The Court **DIRECTS** the Clerk to send a copy of this Order to counsel of record and to

any unrepresented party.

ENTER:

July 6, 2012

IRENE C. BERGER

UNITED STATES DISTRICT JUDGE

SOUTHERN DISTRICT OF WEST VIRGINIA

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